

CLAIMS:

1. A structure for a semiconductor arrangement; comprising a resist structure coupled to a substrate; the resist structure comprising:
 - a depression (301) for depositing of a solution containing a semiconductor or a precursor thereof (309) and
- 5 - a trough (305) aligning at least part of an edge of the depression (309) and separated from the depression (301) by a protrusion (307).
- 10 2. A structure as claimed in claim 1 wherein the resist structure is formed in a single layer of the semiconductor arrangement.
- 15 3. A structure as claimed in claim 1 wherein the trough (305) substantially surrounds the depression (301).
4. A structure as claimed in claim 1 wherein the semiconductor (309) is an organic semiconductor.
- 15 5. A structure as claimed in claim 1 wherein a width of an end of the protrusion (307) distal from the substrate is larger than a width of an end of the protrusion (307) proximal to the substrate.
- 20 6. A structure as claimed in claim 1 wherein a width of an end of the protrusion (307) proximal to the substrate is larger than a width of an end of the protrusion (307) distal from the substrate.
- 25 7. A structure as claimed in claim 5 or 6 wherein the protrusion (307) has a substantially frusto-conical cross section.
8. A structure as claimed in claim 1 wherein the resist structure is formed by a polymer layer.

9. A structure as claimed in claim 1 wherein a cross section of the depression (301) substantially perpendicular to the direction of depression comprises rounded corners.

5 10. A structure as claimed in claim 1 wherein a cross section of the depression (301) substantially perpendicular to the direction of depression is substantially rectangular.

11. A structure as claimed in claim 1 wherein a depth of the trough (305) is substantially the same as a depth of the depression (301).

10 12. A structure as claimed in claim 1 wherein the depression (301) comprises a semiconductor forming an active layer of a field effect transistor.

15 13. A structure as claimed in claim 12 wherein the field effect transistor comprises a source (601) and drain (603) having a plurality of interdigitated electrodes and a gate (605) extending across the plurality of interdigitated electrodes.

20 14. A structure as claimed in claim 13 wherein the depression (301) extends beyond the gate (605) in a direction substantially perpendicular to the longitudinal direction of the interdigitated fingers.

15. A structure as claimed in claim 14 wherein the depression (301) does not extend beyond the gate (605) in a direction substantially aligned with the longitudinal direction of the interdigitated fingers.

25 16. An electronic device comprising the resist structure of any of the claims 1-15.

17. An electronic device as claimed in claim 16 provided with an integrated circuit comprising the structure of claim 12.

30 18. An electronic device as claimed in claim 16, provided with an active matrix backplane or active matrix display comprising the structure of claim 12.

19. An electroluminescent device comprising the structure of claim 12.

20. A method of manufacturing a semiconductor arrangement; the method comprising the steps of:

- providing a substrate;
- applying a resist structure coupled to the substrate; the resist structure comprising a depression (301) for depositing of a solution containing a semiconductor (309) or a precursor thereof and a trough aligning at least part of an edge of the depression (301) and separated from the depression (301) by a protrusion (307); and
 - depositing the solution containing the semiconductor (309) in the depression (301).

21. A method as claimed in claim 20 wherein the depositing of the solution (309) is by a printing process.

15 22. A method as claimed in claim 21 wherein the depositing of the solution (309) is by an ink jet printing process.